**Linear Equations NAME**

**Decide whether each of the following equations is an identity, contradiction, or a conditional equation.**

|  |  |
| --- | --- |
| **1.** | **2.** |
| **3.** | **4.** |
| **5.** | **6.** |

**Decide which of the following pairs of equations are equivalent.**

|  |  |  |  |
| --- | --- | --- | --- |
| **7.** | **8.** | **9.** | **10.** |
| **11.** | **12.** | **13.** | **14.** |

**Solve each of the following equations. Do not use a calculator. When solving problems with fractions and decimals eliminate the fractions and decimals in the equation.**

|  |  |
| --- | --- |
| **15.** | **16.** |
| **17.** | **18.** |

|  |  |
| --- | --- |
| **19. 3(2a + 1) − 4 = 3a − 7[2(3a − 1) + 6]** | **20. 5k + 2[−4(k + 3) − k] = 4 − (2k + 3)** |
| **21.** | **22.** |
| **23.**  **2(5a − 3a2) + (3a − 1)(2a + 3) = 8a + 12** | **24. −.4(.5k − .4) = 1.3 − .6(.3 − .2k)** |
| **25.**  **4x − 7 − (x − 1)(x + 1) = − 3 − (x − 2)(x − 3)** | **26. .2(.1 − 5x) = −.8(x − .1)** |
| **27.** | **28.** |

|  |  |
| --- | --- |
| **29.** | **30.** |
| **31.** | **32.** |
| **33.** | **34.** |

**LITERAL EQUATIONS**

**Solve for x.**

|  |  |
| --- | --- |
| **35.** | **36.** |
| **37.** | **38.** |
| **39.** | **40.** |
| **41.** | **42.** |

**Solve for the indicated variable.**

|  |  |
| --- | --- |
| **43. for r** | **44. for h** |
| **45. for F** | **46. for m** |
| **47. for** | **48.** |
| **49.** | **50.** |
| **51.** | **52.** |